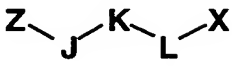
We claim:

1. A compound of the following formula I, or a pharmaceutically acceptable salt thereof:



(I)

wherein:

Z is a monocyclic or bicyclic ring system optionally containing up to 4 heteroatoms selected from N, O, and S, and wherein a $CH_2$ adjacent to any of the said N, O or S heteroatoms is optionally substituted with oxo (=O), and wherein Z is optionally substituted with 0-5 substituents chosen from $R^1$, $R^2$, $R^3$ or $R^4$;

$R^1$ and $R^2$ are each independently selected from the group consisting of H, F, Cl, Br, I, $NO_2$, $CF_3$, CN, $OCF_3$, OH, $C_1$-$C_4$alkoxy-, $C_1$-$C_4$alkylcarbonyl-, $C_1$-$C_6$ alkyl, hydroxy $C_1$-$C_4$ alkyl-, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$alkyl)-, $H_2N(C_0$-$C_4)$alkyl-, $R^6HN(C_0$-$C_4)$alkyl-, $R^6R^7N(C_0$-$C_4)$alkyl-, $R^7S(C_0$-$C_4)$alkyl-, $R^7S(O)$ $(C_0$-$C_4)$alkyl-, $R^7SO_2(C_0$-$C_4)$alkyl-, $R^6NSO_2(C_0$-$C_4)$alkyl-, $HSO_3$, $HO_2C(C_0$-$C_4)$alkyl-, $R^6O_2C(C_0$-$C_4)$alkyl-, and $R^6R^7NCO(C_0$-$C_4)$alkyl-, or

alternatively, $R^1$ and $R^2$, when on adjacent carbon atoms, may be taken together to be methylenedioxy or ethylenedioxy;

$R^3$ is a 5- or 6-membered heterocyclic ring system containing up to 4 heteroatoms selected from N, O, and S, said heterocyclic ring system being optionally substituted with 0-3 $R^5$, wherein when $R^5$ is hydroxy the heterocycle may undergo tautomerization to an oxo species or may exist as an equilibrium mixture of both tautomers;

$R^4$ is selected from F, Cl, Br, I, $NO_2$, $CF_3$, CN, $C_1$-$C_4$alkoxy-, OH, oxo, $CF_3O$, haloalkyloxy, $C_0$-$C_4$ alkylhydroxy, $C_1$-$C_4$ alkyl-, $C_1$-$C_4$ alkylcarbonyl-, $C_0$-$C_4$ alkylOCOR$^6$, $C_0$-$C_4$ alkylOC(=O)OR$^6$, $C_0$-$C_4$ alkylOC(=O)NR$^6$R$^7$, $NH_2$, NHR$^6$, $C_0$-$C_4$

alkylNR$^6$R$^7$, $C_0$-$C_4$ alkylNR$^7$C(=O)OR$^6$, $C_0$-$C_4$ alkylNR$^6$SO$_2$NR$^6$R$^7$, $C_0$-$C_4$ alkylNR$^7$SO$_2$R$^6$, $C_0$-$C_4$ alkylSR$^6$, $C_0$-$C_4$ alkylS(O)R$^6$, $C_0$-$C_4$ alkylSO$_2$R$^6$, SO$_3$R$^7$, $C_0$-$C_4$ alkylSO$_2$NR$^6$R$^7$, $C_0$-$C_4$alkyl SO$_2$NR$^7$ CO(CR$^9$R$^{10}$)$_{0-3}$R$^6$ , $C_0$-$C_4$ alkylCO$_2$H, $C_0$-$C_4$ alkylCO$_2$R$^6$, $C_0$-$C_4$ alkylCONR$^6$R$^7$, and $C_0$-$C_4$alkylCONR$^7$SO$_2$(CR$^9$R$^{10}$)$_{0-3}$R$^6$;

R$^5$ is selected from the group consisting of H, $C_1$-$C_4$ alkyl, $C_3$-$C_7$ cycloalkyl, F, Cl, Br, I, NO$_2$, CN, CF$_3$, OCF$_3$, OH, oxo, $C_1$-$C_4$alkoxy-, hydroxy$C_1$-$C_4$ alkyl-, $C_1$-$C_4$ alkylcarbonyl-, CO$_2$H, CO$_2$R$^6$, CONR$^6$R$^7$, NHR$^6$, and NR$^6$R$^7$;

R$^6$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic ($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, hydroxy $C_0$-$C_4$ alkyl, oxo, F, Cl, Br, CF$_3$, NO$_2$, CN, OCF$_3$, NH$_2$, NHR$^7$, NR$^7$R$^8$, SR$^7$, S(O)R$^7$, SO$_2$R$^7$, SO$_2$NR$^7$R$^8$, CO$_2$H, CO$_2$R$^7$, and CONR$^7$R$^8$;

R$^7$ and R$^8$ are each independently selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_1$-$C_5$ alkoxy)carbonyl, arylsulfonyl, aryl($C_0$-$C_4$ alkyl)-, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic sulfonyl and heterocyclic ($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, CF$_3$, CN, and NO$_2$;

alternatively, R$^6$ and R$^7$, or R$^6$ and R$^8$, or R$^7$ and R$^8$, when both substituents are on the same nitrogen atom, can be taken together with the nitrogen atom to which they are attached to form a heterocycle selected from the group consisting of 1-aziridinyl, 1-azetidinyl, 1-piperidinyl, 1-morpholinyl, 1-pyrrolidinyl, thiamorpholinyl, thiazolidinyl, and 1-piperazinyl, said heterocycle being optionally substituted with 0-3 groups selected from the group consisting of oxo, $C_1$-$C_6$ alkyl,

$C_3$-$C_7$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_5$ alkyl), heterocyclic($C_0$-$C_5$ alkyl), aryl($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, $C_1$-$C_6$ alkylsulfonyl, arylsulfonyl, and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

J is selected from the group consisting of -$NR^7$- and -C(=O)-;

K is selected from the group consisting of -$NR^7$-, -C(=O)-, and -$CHR^9$-;

L is selected from the group consisting of a single bond, -C(=O), -$CR^{10}R^{11}$-, -C(=O)$CR^{10}R^{11}$-, -$CR^{10}R^{11}$C(=O)-, -$CR^{10}R^{11}$C(=O)-, -$HR^{15}$C-$CHR^{16}$-, and -$R^{15}$C=$CR^{16}$;

$R^9$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, and $NO_2$;

$R^{10}$ is selected from the group consisting of H, F, Cl, Br, $C_1$-$C_6$ alkoxy, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

$R^{11}$ is selected from the group consisting of H, F, Cl, Br, OMe, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted

with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

alternatively, $R^{10}$ and $R^{11}$, when on the same carbon atom, can be taken together with the carbon atoms to which they are attached to form a 3-7 membered carbocyclic or 3-7 membered heterocyclic non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, hydroxy $C_0$-$C_4$ alkyl, oxo, F, Cl, Br, $CF_3$, and $NO_2$;

X is selected from the group consisting of $OR^{12}$, $NR^{12}R^{13}$, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_6$-$C_{10}$ aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$, with the proviso that when L is a single bond, X cannot be $NR^{12}R^{13}$;

$R^{12}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, monocyclic or bicyclic aryl($C_0$-$C_4$ alkyl)-, and monocyclic or bicyclic 5-10 membered heterocyclic($C_0$-$C_4$ alkyl)-, and $-CZ^1Z^2Z^3$,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$;

$Z^1$ is selected from the group consisting of $C_1$-$C_8$ alkyl, $C_2$-$C_6$ alkenyl, $C_2$-$C_6$ alkynyl, $C_1$-$C_6$ hydroxyalkyl, $C_1$-$C_4$ alkoxy $C_1$-$C_4$ alkyl, aryl($C_0$-$C_4$ alkyl)-, and 4-10 membered heterocyclic ($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$;

$Z^2$ is selected from the group consisting of $C_1$-$C_8$ alkyl, $C_2$-$C_6$ alkenyl, $C_2$-$C_6$ alkynyl, $C_1$-$C_6$ hydroxyalkyl, $C_1$-$C_4$ alkoxy $C_1$-$C_4$ alkyl, $C_1$-$C_6$ $NR^{17}R^{18}$, aryl($C_0$-$C_4$ alkyl)-, and 4-10 membered heterocyclic ($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$;

$Z^3$ is selected from the group consisting of $C_1$-$C_8$ alkyl, $R^{14}$($C_2$-$C_4$ alkyl)-, $C_2$-$C_6$ alkenyl, $C_2$-$C_6$ alkynyl, $C_1$-$C_6$ hydroxyalkyl, $C_1$-$C_4$ alkoxy $C_1$-$C_4$ alkyl, aryl($C_0$-$C_4$ alkyl)-, 4-10 membered heterocyclic ($C_0$-$C_4$ alkyl)-, $R^{17}O$=C($C_0$-$C_4$ alkyl)-, $R^{17}OO$=C($C_0$-$C_4$ alkyl)-, and $R^{17}R^{18}$ NO=C($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$;

alternatively, $Z^1$ and $Z^2$, when on the same carbon atom, can be taken together with the carbon atoms to which they are attached to form a 3-7 membered carbocyclic or 3-7 membered heterocyclic non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 substituents independently selected from $R^{14}$.

$R^{13}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_1$-$C_6$ alkylsulfonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_4$ alkyl)-, aryl($C_1$-$C_5$ alkoxy)carbonyl , arylsulfonyl, heterocyclic($C_0$-$C_4$ alkyl), heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

alternatively, $R^{12}$ and $R^{13}$, when both are on the same nitrogen atom, can be taken together with the nitrogen atom to which they are attached to form a heterocycle selected from 1-aziridinyl, 1-azetidinyl, 1-piperidinyl, 1-morpholinyl, 1-pyrrolidinyl, thiamorpholinyl, thiazolidinyl, and 1-piperazinyl,

said heterocycle being optionally substituted with 0-3 groups independently selected from oxo, $C_1$-$C_6$ alkyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl,

$C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_5$ alkyl), heterocyclic($C_0$-$C_5$ alkyl), aryl($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, $C_1$-$C_6$ alkylsulfonyl arylsulfonyl and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $CH_3$-, alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

$R^{14}$ is selected from the group consisting of H, $C_1$-$C_{10}$ alkyl, $NO_2$, $CF_3$, CN, F, Cl, Br, $C_1$-$C_{10}$ alkylcarbonyl, haloalkyl, haloalkoxy, OH, $NR^6R^7(C_0$-$C_4$ alkyl)-, $R^6C(=O)O(C_0$-$C_4$ alkyl)-, $R^6OC(=O)O$ ($C_0$-$C_4$ alkyl)-, $R^6O$ ($C_0$-$C_4$ alkyl), $R^6R^7$ $NC(=O)O(C_0$-$C_4$ alkyl)-, $R^6R^7$ $NC(=O)$ ($C_0$-$C_4$ alkyl)-, $R^6O(CR^{10}R^{11})_{2\text{-}6}R^6NC(=O)$ ($C_0$-$C_4$ alkyl)-, $R^6R^7N(CR^{10}R^{11})_{2\text{-}6}R^6NC(=O)$ ($C_0$-$C_4$ alkyl)-, $R^6O_2C(CH_2)_{1\text{-}4}O(C_0$-$C_4$ alkyl)-, $R^6OOC(C_1$-$C_4$ alkoxy),- $R^6OOC(C_0$-$C_4$ alkyl)-, $R^6C(=O)(C_0$-$C_4$ alkyl)-, $R^6C(=O)NR^7(C_0$-$C_4$ alkyl)-, $R^6OC(=O)NR^7(C_0$-$C_4$ alkyl)-, $R^6OC(=NCN)NR^7(C_0$-$C_4$ alkyl)-, $R^6R^7NC(=O)NR^8(C_0$-$C_4$ alkyl)-, $R^6OC(=NC)$ $NR^7(C_0$-$C_4$ alkyl)-, $R^6(CR^{10}R^{11})_{1\text{-}4}$ $NR^7C=O$-, $R^6O$ $(CR^{10}R^{11})_{1\text{-}4}O=CR^7N$-, $NR^6R^7(CR^{10}R^{11})_{1\text{-}4}$ $C=O$ $R^7N$-, $R^6O(CR^{10}R^{11})_{2\text{-}4}R^7N$-, $R^6O_2C(CR^{10}R^{11})_{1\text{-}4}R^7N$, $R^6R^7N$ $(CR^{10}R^{11})_{2\text{-}4}R^7N$-, $R^6R^7NC(=NCN)NR^7(C_0$-$C_4$ alkyl)-, $R^6R^7NC(=C(H)(NO_2))NR^7(C_0$-$C_4$ alkyl)-, $R^7R^8N$ $C(=NR^7)$ $NR^7(C_0$-$C_4$ alkyl)-, $R^6R^7N$ $SO_2NR^8(C_0$-$C_4$ alkyl)-, $R^6SO_2NR^7(C_0$-$C_4$ alkyl)-, $R^6R^7N(C_1$-$C_4)$ CO-, $R^6R^7N(C_2$-$C_6$ alkyl)O-, $R^6CO(CR^{10}R^{11})_{0\text{-}2}$ $R^7N(O_2)S(C_0$-$C_4$ alkyl), $R^6(O_2)S$ $R^7$ $NC(=O)$ ($C_0$-$C_4$ alkyl)-, $R^6S(C_0$-$C_4$ alkyl)-, $R^6S(=O)$ ($C_0$-$C_4$ alkyl)-, $R^6SO_2(C_0$-$C_4$ alkyl)-, $SO_2NR^6R^7$, $SiMe_3$, $R^6R^7N(C_2$-$C_4$ alkyl)-, $R^6R^7N(C_2$-$C_4$ alkoxy)-, $HSO_3$, HONH-, $R^6ONH$-, $R^8R^7NNR^6$-, $HO(COR^6)N$-, $HO(R^6O_2C)N$, $C_2$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl, $C_3$-$C_{10}$ cycloalkylmethyl, aryl($C_0$-$C_4$alkyl)-, heteroaryl($C_0$-$C_4$alkyl)-, aryl($C_0$-$C_4$alkyl)O-, and heteroaryl($C_0$-$C_4$alkyl)O-,

wherein said aryl groups are substituted with 0-2 substituents independently selected from a group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, and $NO_2$;

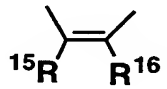
$R^{15}$ is selected from the group consisting of H, halo, cyano, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, and $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from $R^{14}$; and

$R^{16}$ is selected from the group consisting of H, halo, cyano, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from $R^{14}$;

alternatively, when $R^{15}$ and $R^{16}$ are on adjacent carbon atoms, or when $R^{15}$ and $R^{16}$ are oriented on the same side of the double bond, as depicted in the following structure (III)




(III),

$R^{15}$ and $R^{16}$ can be taken together with the carbon atoms to which they are attached to form a 3-7 membered carbocyclic aromatic or nonaromatic ring system, or a 3-7 membered heterocyclic aromatic or nonaromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, $NO_2$;

$R^{17}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_1$-$C_6$ alkylsulfonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, hydroxy($C_2$-$C_4$)alkyl-, $C_1$-$C_3$ alkoxy($C_2$-$C_4$)alkyl-, ($C_0$-$C_4$ alkyl) ($C_0$-$C_4$ alkyl) amino($C_2$-$C_4$)alkyl-, aryl($C_0$-$C_4$ alkyl)-, aryl($C_1$-$C_5$ alkoxy)carbonyl , arylsulfonyl, heterocyclic($C_0$-$C_4$ alkyl), heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, $C_1$-$C_4$ alkoxy $C_1$-$C_4$ alkyl, oxo, F, Cl, Br, $CF_3$, CN, and $NO_2$;

$R^{18}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl),

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$; and

alternatively, $R^{17}$ and $R^{18}$, when both are on the same nitrogen atom, can be taken together with the nitrogen atom to which they are attached to form a heterocycle selected from 1-aziridinyl, 1-azetidinyl, 1-piperidinyl, 1-morpholinyl, 1-pyrrolidinyl, thiamorpholinyl, thiazolidinyl, and 1-piperazinyl,

said heterocycle being optionally substituted with 0-3 groups selected from oxo, $C_1$-$C_6$ alkyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, ($C_1$-$C_6$ alkylcarbonyl)($C_0$-$C_4$alkyl)amino-, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_5$ alkyl), heterocyclic($C_0$-$C_5$ alkyl), aryl($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, $C_1$-$C_6$ alkylsulfonyl arylsulfonyl and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $CH_3$-, alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$.

2. A compound of claim 1, or a pharmaceutically acceptable salt thereof, wherein:

Z is either a 5, 6 or 7 membered monocyclic ring system substituted with $R^3$ or $R^4$ and optionally substituted with 0-4 substituents chosen from $R^1$ or $R^2$, or a 9 or 10 membered bicyclic ring system optionally substituted with 0-5 substituents chosen from $R^1$, $R^2$, $R^3$ or $R^4$, said ring systems optionally contain up to 4 heteroatoms

selected from N, O, and S, and wherein a $CH_2$ adjacent to any of the said N, O or S heteroatoms is optionally substituted with oxo (=O);

$R^3$ is a 5- or 6-membered heterocyclic ring system containing up to 4 heteroatoms selected from N, O, and S, said heterocyclic ring system being optionally substituted with 0-1 $R^5$, wherein when $R^5$ is hydroxy the heterocycle may undergo tautomerization to an oxo species or may exist as an equilibrium mixture of both tautomers;

J and K are taken together to be selected from: –NHC(=O)-, –NHCHR$^9$-, and -C(=O)NH-;

X is selected from the group consisting of $OR^{12}$, $NR^{12}R^{13}$, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_6$-$C_{10}$ aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$, with the proviso that when L is a single bond, X cannot be $NR^{12}R^{13}$; and

$R^{12}$ is selected from the group consisting of ethyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, monocyclic or bicyclic aryl($C_0$-$C_4$ alkyl)-, and monocyclic or bicyclic 5-10 membered heterocyclic($C_0$-$C_4$ alkyl)-, and $-CZ^1Z^2Z^3$,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$.

3. A compound of claim 1, or a pharmaceutically acceptable salt thereof, said compound selected from the group consisting of:

N-(4-Fluorophenyl)-N2-[3-methoxy-4-(5-oxazolyl)phenyl]glycinamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N2-phenylglycinamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N2-(3-methylphenyl)glycinamide;

[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetic acid ethyl ester;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-phenylethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(2-methylphenyl)ethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(3-methylphenyl)ethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(4-methylphenyl)ethanediamide;

(S)-[[3-[[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]amino]phenyl] methyl]carbamic acid tetrahydro-3-furanyl ester;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(3-methoxyphenyl)ethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(phenylmethyl)ethanediamide;

N-(4-Cyanophenyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

3-[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]-3-oxopropanoic acid ethyl ester;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(3-methylphenyl)propanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(phenyl)propanediamide;

(S)-[[3-[[3-[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]-1,3-dioxopropyl]amino]phenyl] methyl]carbamic acid tetrahydro-3-furanyl ester;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]benzeneacetamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-α-oxobenzeneacetamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-1H-indole-2-carboxamide;

N-(1,1-Dimethylethyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[1,1-Bis(hydroxymethyl)propyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-(2-Hydroxy-1,1-dimethylethyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]-2-methylalanine 1,1-dimethylethyl ester;

N-(2-Hydroxy-1,1-dimethylpentyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[2-[(2-Hydroxy-1,1-dimethylethyl)amino]-1,1-dimethylethyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[2-(Dimethylamino)-1,1-dimethylethyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-(1,1-Diethyl-2-propynyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(1,1,3,3-tetramethylbutyl)ethanediamide;

N-(1,1-Dimethylpropyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[1-(Hydroxymethyl)cyclopentyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[2-(4-Fluorophenyl)-1,1-dimethylethyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]-α -methyltyrosine methyl ester;

N-[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]-α-methyltryptophan methyl ester;

N-[1,1-Bis(hydroxymethyl)ethyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]-N-methylethanediamide;

N-(1,1-Dimethyl-3-oxobutyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-N'-(1-methyl-1-phenylethyl)ethanediamide;

N-[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]-2-methylalanine methyl ester;

1-[[[[3-Methoxy-4-(5-oxazolyl)phenyl]amino]oxoacetyl]amino]cyclopropanecarboxylic acid methyl ester;

N-(1-Ethynylcyclohexyl)-N'-[3-methoxy-4-(5-oxazolyl)phenyl]ethanediamide;

and (R)-N-[1-(Hydroxymethyl)-1-methylpropyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]-N-methylethanediamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-phenyl-2-propenamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]benzamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-1-methyl-1H-indole-2-carboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-2-benzofurancarboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]benzo[b]thiophene-2-carboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-1,3-benzodioxole-5-carboxamide;

7-Methoxy-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-benzofurancarboxamide;

5-Hydroxy-N-[3-methoxy-4-(5-oxazolyl)phenyl]-1H-indole-2-carboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-5-(2-pyridinyl)-2-thiophenecarboxamide;

5-(1,1-Dimethylethyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-furancarboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-5-methyl-2-thiophenecarboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-1-methyl-1H-pyrrole-2-carboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-4,5-dimethyl-2-furancarboxamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(4-methylphenyl)-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(4-methylphenyl)-2-propenamide;

(E)-3-(2-Fluorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(3-Fluorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(4-Fluorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(2-Chlorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(3-Chlorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(3-Chlorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-[2-(trifluoromethyl)phenyl]-2-propenamide;

(E)-3-(3-Cyanophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-[4-(Acetylamino)phenyl]-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(2,3-Dimethoxyphenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-3-(2,6-Difluorophenyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(2,3,4-trimethoxyphenyl)-2-propenamide;

(E)-2-Fluoro-N-[3-methoxy-4-(5-oxazolyl)phenyl]-3-phenyl-2-propenamide;

(E)-3-(2-Furanyl)-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(2-thienyl)-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(3-pyridinyl)-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(4-pyridinyl)-2-propenamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-(1-naphthalenyl)-2-propenamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3,4-dimethylbenzamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-2-indolizinecarboxamide;

(E)-N-[3-Methoxy-4-(5-oxazolyl)phenyl]-3-[3-methoxy-4-(phenylmethoxy)phenyl]-2-propenamide;

5-Hydroxy-N-[3-methoxy-4-(5-oxazolyl)phenyl]-1H-indole-2-carboxamide;

N-[3-Methoxy-4-(5-oxazolyl)phenyl]-2,4-dimethyl-5-thiazolecarboxamide; and

8-Hydroxy-N-[3-methoxy-4-(5-oxazolyl)phenyl]-2-quinolinecarboxamide

4. A pharmaceutical composition for the treatment of an IMPDH-associated disorder, comprising a pharmaceutically acceptable carrier, adjuvant or vehicle and at least one compound of claim 1, or a pharmaceutically acceptable salt thereof, in an amount effective therefor.

5. A pharmaceutical composition for the treatment of an IMPDH-associated disorder, comprising a pharmaceutically acceptable carrier, adjuvant or vehicle and at least one compound of claim 2, or a pharmaceutically acceptable salt thereof, in an amount effective therefor.

6. A pharmaceutical composition for the treatment of an IMPDH-associated disorder, comprising a pharmaceutically acceptable carrier, adjuvant or vehicle and at least one compound of claim 3, or a pharmaceutically acceptable salt thereof, in an amount effective therefor.

7. A method for the treatment of an IMPDH-associated disorder, comprising the step of administering to a subject in need thereof an amount effective therefor of at least one compound of claim 1 or a pharmaceutically acceptable salt thereof.

8. A method for the treatment of an IMPDH-associated disorder, comprising the step of administering to a subject in need thereof an amount effective therefor of at least one compound of claim 2 or a pharmaceutically acceptable salt thereof.

9. A method for the treatment of an IMPDH-associated disorder, comprising the step of administering to a subject in need thereof an amount effective therefor of at least one compound of claim 3 or a pharmaceutically acceptable salt thereof.

10. The method of claim 7, wherein said IMPDH-associated disorder is selected from the group consisting of an autoimmune disorder, an inflamatory disorder, a cancer or tumor disorder, a DNA or RNA viral replication disease, and allograft rejection.

11. The method of claim 8, wherein said IMPDH-associated disorder is selected from the group consisting of an autoimmune disorder, an inflamatory disorder, a cancer or tumor disorder, a DNA or RNA viral replication disease, and allograft rejection.

12. The method of claim 9, wherein said IMPDH-associated disorder is selected from the group consisting of an autoimmune disorder, an inflamatory disorder, a cancer or tumor disorder, a DNA or RNA viral replication disease, and allograft rejection.

13. The method of claim 10, wherein said IMPDH-associated disorder is selected from transplant rejection, rheumatoid arthritis, inflammatory bowel disease, hepatitis B, hepatitis C, herpes simplex type I, and herpes simplex type II.

14. The method of claim 11, wherein said IMPDH-associated disorder is selected from transplant rejection, rheumatoid arthritis, inflammatory bowel disease, hepatitis B, hepatitis C, herpes simplex type I, and herpes simplex type II.

15. The method of claim 12, wherein said IMPDH-associated disorder is selected from transplant rejection, rheumatoid arthritis, inflammatory bowel disease, hepatitis B, hepatitis C, herpes simplex type I, and herpes simplex type II.

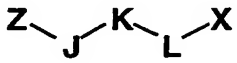
16. The method of claim 7, wherein said compound of claim 1, or a pharmaceutically acceptable salt thereof, is administered with one or more of: an immunosuppressant, an anti-cancer agent, an anti-viral agent, an anti-inflammatory agent, an anti-fungal agent, an antibiotic, an anti-vascular hyperproliferation compound, or an IMPDH inhibitor other than a compound of claim 1 or a pharmaceutically acceptable salt thereof.

17. The method of claim 8, wherein said compound of claim 2, or a pharmaceutically acceptable salt thereof, is administered with one or more of: an immunosuppressant, an anti-cancer agent, an anti-viral agent, an anti-inflammatory agent, an anti-fungal agent, an antibiotic, an anti-vascular hyperproliferation compound, or an IMPDH inhibitor other than a compound of claim 2 or a pharmaceutically acceptable salt thereof.

18. The method of claim 9, wherein said compound of claim 3, or a pharmaceutically acceptable salt thereof, is administered with one or more of: an immunosuppressant, an anti-cancer agent, an anti-viral agent, an anti-inflammatory agent, an anti-fungal agent, an antibiotic, an anti-vascular hyperproliferation compound, or an IMPDH inhibitor other than a compound of claim 3 or a pharmaceutically acceptable salt thereof.

19. The method of claim 17, wherein said compound of claim 2, or a pharmaceutically acceptable salt thereof, is administered with one or more of: another IMPDH inhibitor; a cyclosporin; CTLA4-Ig; an antibody selected from anti-ICAM-3, anti-IL-2 receptor (Anti-Tac), anti-CD45RB, anti-CD2, anti-CD3 (OKT-3), anti-CD4, anti-CD80, anti-CD86, and monoclonal antibody OKT3; an agent blocking the interaction between CD40 and CD154; a fusion protein constructed from CD40 and/or CD154/gp39; an inhibitor of NF-kappa B function; a non-steroidal antiinflammatory drug (NSAID); a gold compound; an antiviral agent; an antiproliferative ; a cytotoxic drug; an TNF-$\alpha$ inhibitor; an anti-TNF antibody; a soluble TNF receptor; and rapamycin (sirolimus or Rapamune); or derivatives thereof.

20. A compound of the following Formula I, or a pharmaceutically acceptable salt thereof:



(I)

wherein:

(1) Z is a saturated, partially saturated or unsaturated monocyclic or bicyclic ring system optionally containing up to 4 heteroatoms selected from N, O, and S, and wherein a $CH_2$ adjacent to any of the said N, O or S heteroatoms is optionally substituted with oxo (=O), and wherein Z is optionally substituted with 0-3 substituents chosen from $R^1$, $R^2$, $R^3$ or $R^4$;

(2) $R^1$ and $R^2$ are independently selected from the group consisting of H, F, Cl, Br, I, $NO_2$, $CF_3$, CN, $OCF_3$, OH, $C_1$-$C_4$alkoxy-, $C_1$-$C_4$alkylcarbonyl-, $C_1$-$C_6$ alkyl, hydroxy $C_1$-$C_4$ alkyl-, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$alkyl)-, $H_2N(C_0$-$C_4)$alkyl-, $R^6HN(C_0$-$C_4)$alkyl-, $R^6R^7N(C_0$-$C_4)$alkyl-, $R^7S(C_0$-$C_4)$alkyl-, $R^7S(O)$ $(C_0$-$C_4)$alkyl-, $R^7SO_2(C_0$-$C_4)$alkyl-, $R^6NSO_2(C_0$-$C_4)$alkyl-, $HSO_3$, $HO_2C(C_0$-$C_4)$alkyl-, $R^6O_2C(C_0$-$C_4)$alkyl-, and $R^6R^7NCO(C_0$-$C_4)$alkyl-;
alternatively, $R^1$ and $R^2$, when on adjacent carbon atoms, may be taken together to be methylenedioxy or ethylenedioxy;

(3) $R^3$ is a 5- or 6-membered heterocyclic ring system containing up to 4 heteroatoms selected from N, O, and S, said heterocyclic ring system being optionally substituted with 0-3 $R^5$, when $R^5$ is hydroxy the heterocycle may undergo tautomerization to an oxo species, or exist as an equilibrium mixture of both tautomers;

(4) $R^4$ is selected from the group consisting of H, F, Cl, Br, I, $NO_2$, $CF_3$, CN, $OCF_3$, OH, $C_1$-$C_4$alkoxy-, hydroxy$C_1$-$C_4$ alkyl-, $C_1$-$C_4$ alkylcarbonyl-, $NH_2$,

$NHR^6$, $NR^6R^7$, $SR^6$, $S(O)R^6$, $SO_2R^6$, $SO_2NR^6R^7$, $CO_2H$, $CO_2R^6$, and $CONR^6R^7$;

(5) $R^5$ is selected from the group consisting of H, F, Cl, Br, I, $NO_2$, CN, $CF_3$, $OCF_3$, OH, oxo, $C_1$-$C_4$alkoxy-, hydroxy$C_1$-$C_4$ alkyl-, $C_1$-$C_4$ alkylcarbonyl-, $CO_2H$, $CO_2R^6$, $CONR^6R^7$, $NHR^6$, and $NR^6R^7$;

(6) $R^6$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic ($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, hydroxy $C_0$-$C_4$ alkyl, oxo, F, Cl, Br, $CF_3$, $NO_2$, CN, $OCF_3$, $NH_2$, $NHR^7$, $NR^7R^8$, $SR^7$, $S(O)R^7$, $SO_2R^7$, $SO_2NR^7R^8$, $CO_2H$, $CO_2R^7$, and $CONR^7R^8$;

(7) $R^7$ and $R^8$ are independently selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_6$ alkynyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_1$-$C_5$ alkoxy)carbonyl, arylsulfonyl, aryl($C_0$-$C_4$ alkyl)-, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic sulfonyl and heterocyclic ($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(8) alternatively, $R^6$ and $R^7$, or $R^6$ and $R^8$, or $R^7$ and $R^8$, when both substituents are on the same nitrogen atom [as in ($-NR^6R^7$) or ($-NR^7R^8$)], can be taken together with the nitrogen atom to which they are attached to form a heterocycle selected from the group consisting of 1-aziridinyl, 1-azetidinyl, 1-piperidinyl, 1-morpholinyl, 1-pyrrolidinyl, thiamorpholinyl, thiazolidinyl, and 1-piperazinyl, said heterocycle being optionally substituted with 0-3 groups

selected from the group consisting of oxo, $C_1$-$C_6$ alkyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_5$ alkyl), heterocyclic($C_0$-$C_5$ alkyl), aryl($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, $C_1$-$C_6$ alkylsulfonyl, arylsulfonyl, and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(9) J is selected from the group consisting of -$NR^7$-, and -C(=O)-;

(10) K is selected from the group consisting of -$NR^7$-, -C(=O)-, and -$CHR^9$-;

(11) L is selected from the group consisting of a single bond (i.e., L is absent ), -C(=O), -$CHR^9$-, -C(=O)$CHR^{10}$-, -$CHR^{10}$C(=O)-, -$CR^{10}R^{11}$C(=O)-, -$HR^{15}$C-$CHR^{16}$-, and -$R^{15}$C=$CR^{16}$-;

(12) $R^9$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, and $NO_2$;

(13) $R^{10}$ is selected from the group consisting of H, F, Cl, Br, $C_1$-$C_6$ alkoxy, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(14) $R^{11}$ is selected from the group consisting of H, F, Cl, Br, OMe, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and

heterocyclic($C_0$-$C_4$ alkyl)-, wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(15) alternatively, $R^{10}$ and $R^{11}$, when on the same carbon atom [as in (-$CR^{10}R^{11}$-)], can be taken together with the carbon atoms to which they are attached to form a 3-7 membered carbocyclic or 3-7 membered heterocyclic non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, hydroxy $C_0$-$C_4$ alkyl, oxo, F, Cl, Br, $CF_3$, $NO_2$;

(16) X is selected from the group consisting of $OR^{12}$, $NR^{12}R^{13}$, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_6$-$C_{10}$ aryl($C_0$-$C_4$ alkyl)-, -$CR^4$=$CR^5$(heteroaryl), -$CR^4$=$CR^5$(aryl), and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$, with the proviso that when L is a single bond (i.e., L is absent), X cannot be $NR^{12}R^{13}$;

(17) $R^{12}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and 4-10 membered heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-3 substituents independently selected from $R^{14}$;

(18) $R^{13}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_1$-$C_6$ alkylsulfonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_4$ alkyl)-, aryl($C_1$-$C_5$ alkoxy)carbonyl , arylsulfonyl, heterocyclic($C_0$-$C_4$ alkyl), heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(19) alternatively, $R^{12}$ and $R^{13}$, when both are on the same nitrogen atom [as in (-$NR^{12}R^{13}$)] can be taken together with the nitrogen atom to which they are attached to form a heterocycle selected from 1-aziridinyl, 1-azetidinyl, 1-piperidinyl, 1-morpholinyl, 1-pyrrolidinyl, thiamorpholinyl, thiazolidinyl, and 1-piperazinyl,

said heterocycle being optionally substituted with 0-3 groups selected from oxo, $C_1$-$C_6$ alkyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_4$ alkyl)-, $C_1$-$C_6$ alkylcarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkyl)carbonyl, $C_1$-$C_6$ alkoxycarbonyl, $C_3$-$C_7$ cycloalkyl($C_0$-$C_5$ alkoxy)carbonyl, aryl($C_0$-$C_5$ alkyl), heterocyclic($C_0$-$C_5$ alkyl), aryl($C_1$-$C_5$ alkoxy)carbonyl, heterocyclic($C_1$-$C_5$ alkoxy)carbonyl, $C_1$-$C_6$ alkylsulfonyl arylsulfonyl and heterocyclicsulfonyl,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from the group consisting of $CH_3$-, alkoxy, F, Cl, Br, $CF_3$, CN, and $NO_2$;

(20) $R^{14}$ is selected from the group consisting of H, $C_1$-$C_{10}$ alkyl, $NO_2$, $CF_3$, CN, F, Cl, Br, $C_1$-$C_{10}$ alkylcarbonyl, $NR^6R^7$($C_0$-$C_4$ alkyl)-, $R^6$ C(=O)O($C_0$-$C_4$ alkyl)-, $R^6$OC(=O)O ($C_0$-$C_4$ alkyl)-, $R^6$O ($C_0$-$C_4$ alkyl), $R^6R^7$ NC(=O) O($C_0$-$C_4$ alkyl)-, $R^6O_2CCH_2O$($C_0$-$C_4$ alkyl)-, $R^6$OOC($C_1$-$C_4$ alkoxy),- $R^6$OOC($C_0$-$C_4$ alkyl)-, $R^6$C(=O)($C_0$-$C_4$ alkyl)-, $R^6$C(=O)$NR^7$($C_0$-$C_4$ alkyl)-, $R^6$OC(=O)$NR^7$($C_0$-$C_4$ alkyl)-, $R^6$OC(=NCN)$NR^7$($C_0$-$C_4$ alkyl)-, $R^6R^7$NC(=O)$NR^8$($C_0$-$C_4$ alkyl)-, $R^6R^7$NC(=NCN)$NR^7$($C_0$-$C_4$ alkyl)-, $R^6R^7$NC(=C(H)($NO_2$))$NR^7$($C_0$-$C_4$ alkyl)-, $R^7R^8$N C(=$NR^7$) $NR^7$($C_0$-$C_4$ alkyl)-, $R^6R^7$N $SO_2NR^8$($C_0$-$C_4$ alkyl)-, $R^6SO_2NR^7$($C_0$-$C_4$ alkyl)-, $R^6$S($C_0$-$C_4$ alkyl)-, $R^6$S(=O) ($C_0$-$C_4$ alkyl)-, $R^6SO_2$($C_0$-$C_4$ alkyl)-, $SO_2NR^6R^7$, $SiMe_3$, $R^6R^7$N($C_2$-$C_4$ alkyl)-, $R^6R^7$N($C_2$-$C_4$ alkoxy)-, $HSO_3$, HONH-, $R^6$ONH-, $R^8R^7NNR^6$-, HO($COR^6$)N-, HO($R^6O_2C$)N, $C_2$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl, $C_3$-$C_{10}$ cycloalkylmethyl, aryl, heteroaryl, arylO-, and aryl($C_1$-$C_5$ alkyl)-,

wherein said aryl groups are substituted with 0-2 substituents independently selected from a group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, and $NO_2$;

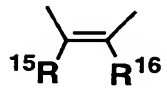
(21) $R^{15}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, and $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from $R^{14}$; and

(22) $R^{16}$ is selected from the group consisting of H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ alkenyl, $C_3$-$C_{10}$ cycloalkyl($C_0$-$C_4$ alkyl)-, aryl($C_0$-$C_4$ alkyl)-, and heterocyclic($C_0$-$C_4$ alkyl)-,

wherein said aryl or heterocyclic groups are substituted with 0-2 substituents independently selected from $R^{14}$;

(23) alternatively, when $R^{15}$ and $R^{16}$ are on adjacent carbon atoms [as in -$HR^{15}C$-$CHR^{16}$-], or when $R^{15}$ and $R^{16}$ are oriented on the same side of the double bond [as in structure (III),




(III)]

$R^{15}$ and $R^{16}$ can be taken together with the carbon atoms to which they are attached to form a 3-7 membered carbocyclic aromatic or nonaromatic ring system, or a 3-7 membered heterocyclic aromatic or nonaromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 substituents independently selected from the group consisting of $C_1$-$C_4$ alkyl, $C_1$-$C_4$ alkoxy, F, Cl, Br, $CF_3$, $NO_2$.

21. A pharmaceutical composition for the treatment of an IMPDH-associated disorder, comprising a pharmaceutically acceptable carrier, adjuvant or vehicle and at least one compound of claim 20, or a pharmaceutically acceptable salt thereof, in an amount effective therefor.

22. A method for the treatment of an IMPDH-associated disorder, comprising the step of administering to a subject in need thereof an amount effective therefor of at least one compound of claim 20 or a pharmaceutically acceptable salt thereof.

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